Distributed Systems

COMP90015 2019 Semester 1 Tutorial 8

Things to cover in Tutorial 8

Security Questions

SSL Explanation! Why do we need it?

Code Demonstration : SSL Demonstration

Security Questions

- 1. List and briefly explain some worst case assumptions when designing a secure system.
- 2. Define encryption and describe the two main types of keys used by encryption algorithms.
- 3. Discuss the three major roles that encryption plays in the implementation of secure systems.
- 4. Explain how digital signatures work.

Security Questions

- 5. How does Alice send a secret message to Bob if they both share a secret key?
- 6. How can Alice authenticate and communicate secretly with Bob assuming there is an authentication server that knows Alice's and Bob's secret keys?
- 7. Assuming that Bob has a public/private key pair, how can Alice and Bob establish a shared key to communicate secretly using a Key Distribution Service?